

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,476	10/17/2001	Timothy James Collins	IND10254	6045
22917	7590	09/02/2004	EXAMINER	
MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD IL01/3RD SCHAUMBURG, IL 60196			HARVEY, DIONNE	
			ART UNIT	PAPER NUMBER
			2643	

DATE MAILED: 09/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/981,476	<b>Applicant(s)</b> COLLINS ET AL.	
	<b>Examiner</b> Dionne N Harvey	<b>Art Unit</b> 2643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☐ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1,4-7,9,11 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Steeves (US 6,570,487).

Regarding claim 1, the claimed method is inherently taught by the apparatus of Steeves, which comprises: In figure 2, Steeves teaches an antenna **204** for receiving and transmitting a signal, which reads on "receiving a carrier signal"; In column 7, lines 40-42, Steeves teaches that while in low-power standby state, tags monitor the RF environment for an activation signal from the reader, which reads on "continuously monitoring the carrier signal..."; In figure 3, Steeves teaches a flowchart for illustrating the transmission of information between a tag and reader wherein after a tag receives a request for evaluation, the tag must evaluate whether or not the request is relevant **304**, which reads on "...for a first predetermined condition"; and later in the flowchart, the tag will determine whether or not additional data should be assembled **313**, reading on "and a second predetermined condition"; if the request is relevant to the particular tag or tag grouping, the tag will assemble data for transmission **305**, which reads on "if the first predetermined condition is satisfied, transmitting data"; if the request is not relevant to the particular tag or tag grouping, the tag will go to a standby state **306**, which reads on "if the first predetermined condition subsequently is not satisfied, ceasing transmission

of the data"; and once the tag determines that no further data is requested **313** the tag will go to standby state, thereby reading on "if a second condition is satisfied, ceasing transmission of data."

Regarding claim 4, in column 10, lines 11-12, Steeves teaches that a tag or tag grouping may receive an activation/wakeup signal consisting of a short pulse 8m in duration, which once received, the tag may transmit back the received ID data, which reads on "wherein the first predetermined condition is satisfied when a predetermined synchronization pulse is received."

Regarding claim 5, In column 7, lines 55-67, Steeves teaches that the nature of the request of relevancy to the tag or tag grouping will vary, for example one request may be for tags corresponding to fresh food crates. Steeves therefore teaches that the predetermined conditions are random.

Regarding claim 6, In figure 2, Steeves teaches at least a first device **151** comprising: a receiver **203** for receiving a carrier signal; in column 7, lines 40-42, Steeves teaches that the device monitors the RF environment for an activation signal, thereby teaching "a monitor, coupled to the receiver, for continually monitoring the carrier signal"; in column 7, lines 58-64, Steeves teaches that upon receipt of a request from the reader, each device *makes a determination* as to whether the request is relevant to the particular tag and if relevant, the tag *assembles a packet of data* for transmission, which reads on "a storage medium having data stored therein"; in figure 3, Steeves teaches a flowchart of the transmission of data between a tag and reader wherein a tag or tag-grouping will determine whether or not a particular request is

reverent **304**, which reads on “a first condition”; and upon determining that the request is relevant, assembling data, and calculating a time slot for the data transmission, the tag will wait for the arrival of the time slot **310** to transmit the assembled data **311**, the Examiner has interpreted determining the arrival of the time slot for data transmission as reading on “a second condition”; Steeves therefore teaches transmitting at least a portion of the data when the first and the second condition are satisfied.

Regarding claim 7, in column 7, lines 55-56 and lines 64-65, Steeves teaches that the reader transmits a request to a single tag, to a subset of tags, or to any tag within range...the request may be for all tags corresponding..., which reads on “wherein the first and second conditions of a first device are the same as the first and second conditions of a second device.

Regarding claim 9, Steeves further teaches that in given grouping of activated tags, one or more tags may not correspond to the request for relevancy, thereby reading on “the first and second conditions of a first device are different than the first and second conditions of a second device.

Regarding claim 11, In column 7, lines 55-67, Steeves teaches that the nature of the request of relevancy to the tag or tag grouping will vary i.e., not all tags may correspond to “fresh food crates”. Steeves therefore teaches that at least one of the first and second conditions are randomly assigned.

Regarding claim 12, Steeves teaches that more than one device may correspond to the relevancy request, i.e., more than one tag may correspond to “fresh food crates”,

thereby reading on "at least one of the first and second conditions are uniformly distributed."

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2,3,8,10 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Steeves (US 6,570,487) in view of Meier (US 5,294,931).

Regarding claims 2 and 3, Steeves does not teach that each, the first predetermined condition and second conditions are satisfied when a received power level exceeds a threshold.

Meier teaches a means for identifying transponders, which are well known in the art, and are often incorporated into Tag devices for inventory/storage purposes. In column 2, lines 30-68, Meier teaches that a plurality of transponders, individually, may be constructed so as to respond only when the power level of a received signal falls within a predetermined range. In Meier's discussion of "Transponder 1", while the power level of the interrogation pulse exceeds the lower power level threshold, it also exceeds the upper power level threshold, therefore "Transponder 1" does not transmit information, thereby reading of the limitations of claims 2 and 3.

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the teachings of Steeves and Meier, also incorporating Meier's method of selectively activating transponders in tags, for the purpose of limiting the number of simultaneously produces answer signals during an interrogation.

Regarding claims 8, 10 and 13, In claim 1 line 3-6, Meier teaches "...only those transponders which have stored an amount of voltage which falls within their predetermined window, respond", thereby reading on "the first and second devices transmit simultaneously."

### ***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dionne N Harvey whose telephone number is 703-305-1111. The examiner can normally be reached on 9-6:30 M-F and alternating Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on 703-305-4708. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dionne Harvey

  
CURTIS KUNTZ  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600